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AUTHOR O'Connor, Penny; Chatham-Carpenter, April
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ABSTRACT

One of the challenges in teaching a hybrid Basic Course in Communication is the wide variety of topics that can be covered in one semester. Two basic course instructors have found that their recently opened Basic Course computer lab gave them the opportunity to develop interdisciplinary assignments to help more efficiently address various communication contexts and topics in the basic course. This paper tells about one such assignment found to be successful in introducing students to group communication concepts, different cultures, relevant technological applications, and multi-media presentation tools. The paper: (1) outlines the basic assignment and explains two "tracks" for the project they tried (i.e., presenting intercultural group topics using multi-media, presentation tools; teaching some technological application as a group); (2) discusses results and outcomes of doing this assignment over two semesters; and (3) provides recommendations for others planning to utilize similar assignments. Appendixes contain a list of computer lab hardware and software; a group decision-making assignment; instructions for a group analysis paper; and a group discussion evaluation form. (Author/RS)

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ED 432 022

# "The 'Mouse' that Roared": Using Computer Labs for Basic Course Group Projects

Penny O'Connor and April Chatham-Carpenter

University of Northern Iowa
Department of Communication Studies
Cedar Falls, Iowa 50614-0357
(319) 273-2217

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CS 510 105

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## Abstract

One of the challenges in teaching a hybrid Basic Course in Communication is the wide variety of topics that can be covered in one semester. We have found that our recently opened Basic Course computer lab gave us the opportunity to develop inter-disciplinary assignments to help more efficiently address various communication contexts and topics in the basic course. This paper tells about one such assignment we found to be successful in introducing students to group communication concepts, different cultures, relevant technological applications, and multi-media presentation tools. In the paper, we (a) outline the basic assignment and explain two "tracks" for the project we have tried (i.e., presenting intercultural group topics using multi-media presentation tools; teaching some technological application as a group), (b) discuss results and outcomes of doing this assignment over two semesters, and (c) provide recommendations for others planning to utilize similar assignments.

## Introduction

For several semesters, faculty connected to the Basic Course in Communication at the University of Northern Iowa have been exploring the use of technology, as we experiment with various ways of effectively implementing our required general education Oral Communication hybrid basic course (cf. Chatham-Carpenter, 1995). Before Fall, 1997, most this experimentation had been in the delivery of our weekly mass lecture with the use of multimedia platforms (i.e., Hypercard; Adobe Persuasion; Microsoft PowerPoint); at that point, there was no equipment for students to use, besides miscellaneous computer labs on campus, to develop and present similar materials in their individual recitation labs.[1] Our Basic Course director, Melissa Beall, received a technology grant from our university to set up a Macintosh computer lab for the Oral Communication course, which was opened in the Fall, 1997, semester. This laboratory had been under study and development for several years prior to its opening, and was a much-anticipated addition to the Basic Course. The lab houses 25 individual student Power Macintosh computers, a teacher's station and printer, and a projection system for the teacher's station. See Appendix A for software and hardware specifics.

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[1] Each semester we have five mass lecture sections, ranging in size from 100-250. Students attend these 50-minute lecture sessions once a week (50-minute class period), along with two other 50-minute labs a week. The students do all of their presentations in these smaller "recitation"-type labs, consisting of 20-25 students each.

The computer lab was intended to be a place not only where students could develop their own multimedia speaking materials for classroom presentations (e.g., Rabb, 1993; Wilder & Fine, 1996), but also where they could be actively learning about communication with the use of interactive multimedia materials (cf. Cronin, 1993, 1994; Cronin & Cronin, 1992; Cronin, Grice, & Olsen, 1994; Cronin & Kennan, 1994).

Since its opening, the lab has been used regularly by Basic Course and other Communication Studies faculty for a variety of reasons. Most Basic Course faculty have used the class to teach Internet research skills for speakers, and many have briefly introduced students to presentational software such as PowerPoint. Still others have taught short units on mediated communication and electronic media literacy and analysis, with individual student assignments focusing on Web page analysis and the like. Further, several faculty have received technological mini-grants to author interactive CD-ROM or web-based programs for use in the classroom, similar to work by Michael Cronin and others at Radford University (1993, 1994; Cronin & Cronin, 1992; Cronin, Grice & Olsen, 1994; Cronin & Kennan, 1994). The lab is also open for student use during many evening and weekend hours. Assignments such as these, while valuable, necessitated minimal group and cooperative learning experiences for students and did not yet maximize use of the laboratory space on a daily basis (a concern from the administrative perspective). In an effort to rectify such pedagogical and political concerns, we developed a new assignment for our sections of the Basic Course. This assignment required students to work together to create a class presentation using computer-generated visuals. In this paper, we will outline the basic assignment, discuss results and

outcomes, and provide recommendations for others planning to utilize similar assignments.

## The Assignment

The objective of this assignment was to provide students a small group communication experience that would illustrate the benefits and problems associated with small group communication and decision-making. Also, we wanted to engage students in the development and use of some form of technology, preferably computer-based, in a 20-minute group presentation to the class.

In the past, our traditional small group assignment in the Basic Course required each small group to select a culture and provide an informational report of that culture to the class. Creativity and variation in formats was encouraged. This assignment was valuable because it essentially "killed two birds with one stone," allowing us to cover both intercultural and small group communication in one assignment.

Since one of our goals for the new assignment was to engage students in the use of technology, simply adding the technology requirement to the intercultural topic assignment was a simple solution, creating "Track One." (See Appendix B for assignment handout). Students were still required to select a specific culture (or co-culture) and teach the class about that culture, using some kind of technology as a visual aid for at least part of the presentation. While we encouraged computer-based technology, we did

allow some groups to utilize video, overheads or other media, depending upon what was appropriate for their topic. "Track Two" of the assignment provided a very different option for students—they were to focus on the topic of Communication technology itself. Students could "teach" us how to use a specific type of software, or could utilize a more general approach by discussing communication technology and its influence on our lives.

Ideally, we had hoped to see somewhat of a balance between the two tracks, and therefore let groups choose for themselves what track to pursue. Indeed, at least one group per section did choose Track Two, although we did have many more completed projects on Track One.

Students were divided into groups of 5-7, either randomly or based on results of an interest and/or knowledge survey conducted by instructors. The assignment was given on week 10 of a 16-week semester, to be presented the final week of the semester.

## Results

There were 22-25 students in each lab section, creating four groups per section. The authors, along with several graduate teaching assistants,[2] conducted this assignment over two semesters (9-10 sections each semester), resulting in a total of 76 completed projects. Results were interesting and quite varied, and student reaction, while mixed, was generally positive. A more detailed discussion of these results follows.

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[2] Several graduate teaching assistants taught with us during the two semesters that we piloted this assignment, being each responsible for 1-2 "recitation" labs connected with our mass lecture section. We want to acknowledge the work they did to make these assignments as successful as they were. The Graduate Teaching Assistants were (in alphabetical order): Mark Baas, Edward Ellis, Kim Hartz, Laura Sohl, and Marijo Wendling.

Assignment Options Selected

As mentioned earlier, the majority of the small groups opted for Track One, teaching about a culture, while utilizing technology in some way. Technology, as the topic itself, was selected in approximately one-fourth of the groups. This was not a surprise to us, for a few reasons. First, we were aware when verbally giving the assignment, that we were able to provide far more examples of "culture" topics we had seen used before, having used the culture assignment for many semesters. Since we had never actually used the technology track for the assignment, it was more difficult to describe topic ideas to the students. This lack of specificity probably resulted in a slightly more "vague" Track Two assignment. Students obviously prefer to receive a more clear, well-exemplified assignment.

Second, we are assuming that Track Two appealed less to students simply due to the technological nature of the topic(s) selected. The students at our university can be categorized as generally having very high computer literacy and access. However, teaching these concepts to others is quite another story for many of them. It became quite clear that in both the presentations themselves and our informal observation of some early group meetings, groups who selected Track Two worked under a more autocratic leader approach. One or two individuals in these groups spearheaded both the topic selection and presentation of information. This was particularly true in groups whose topics related to a specific type of software—one or two "experts" in these groups were

evident leaders. Reflection papers written by students supported these observations. In some sections, this may be due to the fact that instructors made an attempt to place at least one computer "expert" in each group.

Track One topics. Culture topics used by Track One groups included (this is not a comprehensive list): Irish, Filipino, Native American, Spanish, Amish, African, Mexican, Jamaican, Australian Aboriginal, Israeli, Egyptian and U.S. 1970s culture. Many groups presented a general approach to their culture, discussing religion, language, food, dance, rituals, etc. Others specified a more narrow aspect of the broader culture. Examples include: types and rituals of dance in Filipino culture, the running of the bulls in Pamplona, the immigration of the Irish into the U.S., food in Italian culture, Hawaiian luaus, and English language and dialects. A few groups chose a cross-cultural approach, focusing on a concept across cultures, such as nonverbal communication or Christmas traditions.

Track Two topics. Topics selected for Track Two were similarly diverse. Some included: using FrontPage to create a personal web page, using Adobe PhotoShop, advanced features of e-mail systems, using Microsoft Excel to keep a personal grade book, technology in deaf education, distance learning, telephone as a communications tool, and relationship development through mediated communication (chat rooms, e-mail).

Formats of Presentations

The original assignment asked students to be creative in their choice of format for presentation. Students were allowed to use any basic format (or combination of formats) they chose, with the exception of 6-7 individual speeches. Most formats used to present information were quite creative and unique. There were a wide variety of formats used. Some groups presented in the computer lab, while others were in a traditional classroom. Most, but not all, used computer technology of some kind. Technology use in the Track One assignment included overheads, videotape clips, PowerPoint and Internet. One group used PowerPoint to create a realistic-looking "jeopardy" game board for "Aboriginal Jeopardy" (probably soon to be a popular Australian game show). The 1970s culture group used a similar PowerPoint jeopardy display, but also incorporated costumed characters, dance, and music. Many of the other culture groups utilized PowerPoint to show slides of their culture. Some of these were simply text-based, while others had scanned in photos and other images. Some of the more creative presentations are listed below. For example, a group presenting Mexican culture in the computer lab used the Internet as their visual aid, projecting on a screen various web pages, quick time movies and images of Mexican culture, which they had earlier bookmarked for quick access. A more focused topic, the Running of the Bulls in Pamplona, showed a quick-time movie from the Internet within their presentation. The Filipino topic group had created their own website, which linked to pages of Filipino dance that they were able to show the audience. A group discussing

Christmas across cultures took the audience on a "tour" of websites devoted to Christmas. The Ireland group was the only culture group to engage the audience on their own computers, utilizing the entire lab. For part of their presentation, they divided students into groups and conducted a "web race," which consisted of a competition to answer trivia questions about Ireland by searching the Internet (i.e., weather today in Dublin, restaurant that serves Shepherd's pie, largest county in Ireland).

In Track Two, the technology was generally used to a higher degree. In most (but not all) cases, technology was an integral part of the presentation, rather than simply a tacked-on visual aid. Some of the Track Two groups utilized the entire lab and taught the audience, who was following along on their own computers, to use a program (such as PhotoShop or Excel). In one presentation, audience members played along by designing their own album cover after seeing some of the advanced features of the software. In another, students at their own computers were encouraged to input their own grade data into cells in Excel. Other groups used the technology more as a visual (similar to the Track One groups), demonstrating both why and how to create a web page by displaying a company web page and then introducing FrontPage software. One group, focusing on the topic of deaf education technology, used more traditional forms of media, including posters, charts and video. A final group, addressing the topic of distance learning through the Iowa Communications Network (ICN) actually divided the group and audience by placing them at two ICN sites and had the students communicate through the network, between the two locations.

Outcome and Evaluation

As stated earlier, the grades given in these group presentations were generally high, indicating instructor approval of the finished product. The presentations were, for the most part, interesting, informative and in some cases even enlightening. While some lacked much impact, others were truly creative and fun.

As instructors, we felt that most assignment objectives were met. Students definitely experienced the frustrations and advantages of small group communication and decision-making. This was evident in the papers they submitted (see Appendix C for paper assignment). Most of them also at least dabbled in technology during the process, and for many it was an entirely new experience. It was encouraging to see that several groups went far beyond the minimum requirement, creating, for example, a very detailed PowerPoint presentation, or even their own web page. They seemed to have gained information about the technology and/or another cultures, as well as how to present such information to an audience in a group format. These objectives were maximized since each student learned from every presentation (not just the one they took part in creating).

There were additional benefits reaped by the assignment, in our estimation. These included a holistic learning experience, since at least two (and sometimes more) separate concepts were taught during this process. The peer teaching that took place was also mentioned frequently in student papers, and seemed to be a real advantage for students.

We did encounter some problems in the running of this assignment, which are briefly described below. Students who chose Track Two found it difficult to complete their presentation in the allotted 20 minutes, often needing a whole class period to do their presentation. We were able to accommodate them in most cases, if we knew this

potential problem ahead of time, by extending the presentation dates to three-four total class periods, instead of two class periods as originally planned. A second problem we encountered was lab scheduling for the actual presentation day. Several of our "recitation" labs were scheduled at the same time of day, making it impossible for all classes to be in the computer lab all the days of group presentations. We attempted to encounter this problem by scheduling the Track One presentations that only needed PowerPoint computer capability in our regularly scheduled "recitation" lab classrooms, not in the computer lab, since we have Power Macintosh systems equipped with PowerPoint software and an LCD panel projection system in each of these Oral Communication designated university classrooms.

A third problem was the difference in quality in types of visuals chosen by students in Track One, in contrast with Track Two. Track Two often necessitated the use of more "bells and whistles" with the visuals, so students who chose Track One sometimes felt they did not stand a chance in terms of grading comparison to those groups who chose Track Two. This issue will be addressed further in the next section.

## Recommendations

After having assigned this group experience for two semesters and collecting input from the instructors involved, there are several recommendations we would make for anyone considering a similar assignment.

First and most importantly, we would recommend greater consistency in the basic requirements of the assignment, to make grading simpler and fairer. This does not mean

students could not be flexible and creative in their topic/format selection. Having the two assignment tracks, while interesting, made the assignment completely different in the students' eyes. Some students mentioned that it was difficult to get up and give their "simple" presentation on the Amish, for example, after seeing a high-tech teaching lesson that involved the class much more. We would suggest, for student comfort level and more objectivity in grading, that instructors choose either Track One or Track Two in a given semester, rather than presenting both options.

Another consistency we would add is that all groups would be required to use computer technology, either instead of or in addition to another form of visual aid. Assuming your students have equal access to a computer lab, this is a fair and reasonable requirement that would again promote fairness in grading. For example, the group on deaf education provided a very informative presentation, but used only posters and video clips. It was difficult for the instructor, on the criteria of visual aids (see Appendix D for critique sheet), to rank this group as highly as the others, resulting in a lower overall grade than they felt they deserved. A clear, consistent requirement would circumvent this, and also fulfill the technology assignment objective for all groups.

We would also suggest that the instructors give more time in which this assignment could be completed. This could be in terms of weeks between assignment and due date, or simply a little more in-class time in which to work. Our assignment was given a full six weeks before it was due. However, we only used one class period to briefly introduce students to PowerPoint, and never again met in the lab until the projects

were due. This required students to meet on their own in the lab during open lab time. Student papers and comments indicated that this was a problem for many, and no doubt contributed to one or two students actually doing the technological work.

Finally, we would recommend that attention be paid to a few technological concerns. Unless the lab you utilize has an abundance of software available, be prepared to see several very similar presentations. If you have access to a network server, suggest that students place items on that server to share with the class. In this way, a greater variety of software can be used/taught, providing more variety.

## Conclusion

The rapid addition and expansion of computer laboratories in Communication Studies programs across the country has created new and exciting opportunities for our students (Chatham-Carpenter, 1995). Many Basic Course students, particularly freshmen, have yet to receive these opportunities in other classes. Utilizing a small group project like the one analyzed here may give them the chance to use the laboratory setting in a less threatening context, working within a small group. It serves the dual purpose of teaching small group communication in a task-oriented, concrete way. Overall, we have found that our recently opened Basic Course computer lab gives us the opportunity to develop inter-disciplinary assignments to help more efficiently address various communication contexts and topics in the basic course. Students and faculty thoroughly enjoyed this cooperative educational experience.

References

Chatham-Carpenter, A. (1995, April). Making a computer laboratory in support of the basic communication course: Some basic issues. Paper presented at the annual convention of the Central States Communication Association, April 19-23, 1995.

Cronin, M. W. (1993). Teaching listening skills via interactive videodisc. T.H.E. Journal, December, 62-68.

Cronin, M. W. (1994). Interactive video instruction for teaching organizational techniques in public speaking. In C. Newburger (Ed.), Basic Communication Course Annual, 6, 19-35.

Cronin, M., & Cronin, K. (1992). Recent empirical studies of the pedagogical effects of interactive video instruction in "soft skill" areas. Journal of Computing in Higher Education, 3 (2), 53-85.

Cronin, M.W., Grice, G. L., & Olsen, R. K., Jr. (1994). The effects of interactive video instruction in coping with speech fright. Communication Education, 43, 42-53.

Cronin, M. W., & Kennan, W. R. (1994). Using interactive video instruction to enhance public speaking instruction. In C. Newburger (Ed.), Basic Communication Course Annual, 6, 1-18.

Rabb, M. (1993). The presentation design book: Tips, techniques and advice for creating effective, attractive slides, overheads, multimedia presentations, screen shows and more (2nd ed.). Chapel Hill, NC: Ventana Press.

Wilder, C., & Fine, D. (1996). Point, click & wow; A quick guide to brilliant laptop presentations. San Diego, CA: Pfeiffer.

## Appendix A

### MAC Computer Lab Hardware & Software

Hardware

There are 26 PowerMacintosh 8500's w/64 MB RAM, with 17" color monitors. They are currently running Mac Operating System 8.1, but will be upgraded to 8.5 by Spring, 1999.

We also have a digital scanner, projection system, and ZIP drives.

Software

- Imaging & Publishing
  - Adobe Illustrator 7.0
  - Adobe Photoshop 5.0
  - Adobe Streamline 4.0
  - Adobe PageMaker 6.5
  - Painter 5.0
- Multimedia
  - SoundEdit 16
  - HyperStudio Player 3.1
  - Microsoft PowerPoint '98
  - Apple CD Audio Player
  - Apple Video Player
- Office Applications
  - Microsoft Word, Excel, & PowerPoint '98
  - FileMaker Pro
  - MS Organization Chart 2.0
  - Adobe Table 3.0
- Internet & Email
  - Netscape Navigator 4.04
  - NCSA Telnet 2.7b4
  - Web Creation Folder
    - Claris Home Page 3.0
    - WebPainter 1.0.1
    - wwwArt
    - Web Explosion
    - Fetch 3.0.3
    - Kaboom! Factory
    - HyperStudio 3.1
    - Web Page Construction Kit
    - Java Applet Runner
- Utilities
  - Acrobat Reader 3.0
  - Disinfectant
  - Eradicator
  - OmniPage Pro 8.0
- CD Authoring
  - Adaptec Jam 2.1
  - Adaptec Toast 3.5.3
  - Toast Audio Extractor

Appendix B

**GROUP DECISION-MAKING ASSIGNMENT** (50 pts.)

You will be assigned to a group of 5-7 people, with the goal of preparing and presenting a 20-minute lesson on a selected topic related to Communication & Technology OR Culture & Communication. You will need to use a computer multi-media program installed in the CAC lab (for ex., PowerPoint) to develop your materials, or your group may opt to teach us how to do something on the computers in the lab. You will be given some in-class time to work, but will also need to find time to work outside of class. Your group will need to turn in a typed group outline of your presentation to your lab instructor the day of your group presentation.

**EVALUATION FORM**

Each group member should bring a copy of this evaluation form the day of their group presentation, with your ratings of group members provided on this form (see #5 below).

1. CONTENT (10 pts.)
   - Interesting and relevant to the class
   - Met time limit
   - Well-documented

2. ORGANIZATION (10 pts.)
   - Introduction -- purpose clear
   - Body -- clear, well-developed points
   - Conclusion -- summary provided

3. VISUAL AIDS (10 pts.)
   - Clear
   - Effective
   - Used to enhance presentation

4. DELIVERY (10 pts.)
   - Eye contact
   - Vocalics effective
   - Physical delivery

5. INDIVIDUAL PARTICIPATION (10 pts.): How valuable was each group member (list below) to the group overall? Provide a brief, 1-sentence justification for your rating after each individual's rating. (Do not rate yourself.)

   0-2 = no participation
   3-5 = minimal participation
   6-8 = average participation
   9-10 = excellent

   Name _____ Score _____

   Name _____ Score _____

   Name _____ Score _____

   Name _____ Score _____

   Name _____ Score _____

   Name _____ Score _____

   Name _____ Score _____

Appendix C

GROUP ANALYSIS PAPER (15 pts.)

**Your group** will write a 7-15 page paper (typed, double-spaced; length is dependent on how many group members are in your group) that analyzes various aspects of small group behavior seen in your group meetings. Each person in the group will choose ONE of the topics listed below, in coordination with the rest of the group, and write 1-2 pages on that particular topic using course/text concepts and examples from your group; **the group** will then write an introduction and conclusion to tie together the individual papers. Each individual paper will be graded separately (see criteria below), but should be turned in as part of the group paper, as a complete document all stapled together. Please write your name in the top right-hand corner of your portion of the paper. (NOTE: We are not concerned that the paper be formatted in the same font, margins, etc.)

TOPIC AREAS: Group forms/roles of communication, decision-making, leadership, conflict management, listening, persuasion, group rules/norms, interaction patterns, gender influences, and/or cultural influences (or other topics approved by lab instructor and relevant to group communication).

You will be graded on the following scale (each person should turn in a copy of this grading sheet with the group paper):

---

Student Name _____ Individual Topic _____

1. Individual's Explanation of Course Concept(s) & Examples (10 pts.) _____
   - Definition & description of course concept(s)
   - Clear and adequate example/descriptions from multiple group meetings

2. Individual's Writing Style (3 pts.) _____
   - Clear & easy to follow
   - Free of grammatical & spelling concerns

3. Group Paper Organization (2 pts.) _____
   - Introduction -- paper introduced with attention-getter, psychological orientation, and logical orientation
   - Conclusion -- paper concluded with logical closure, psychological closure, & clincher

TOTAL GRADE (15 pts.) _____

Appendix D

## GROUP DISCUSSION EVALUATION FORM

**Group Topic:**

**Group Members:**

1. CONTENT (10 pts.)
   - Interesting and relevant to the class
   - Met time limit
   - Well-documented

2. ORGANIZATION (10 pts.)
   - Introduction -- purpose clear
   - Body -- clear, well-developed points
   - Conclusion -- summary provided

3. VISUAL AIDS (10 pts.)
   - Clear
   - Effective
   - Used to enhance presentation

4. DELIVERY (10 pts.)
   - Eye contact
   - Vocalics effective
   - Physical delivery

TOTAL GROUP GRADE (40 possible group points): _____

5. INDIVIDUAL PARTICIPATION (10 pts.) -- see separate grade slips for individual grade